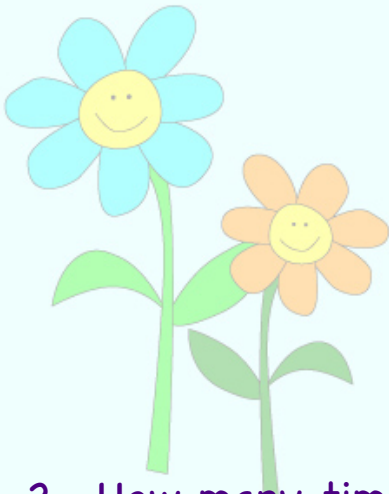


Warm-Up

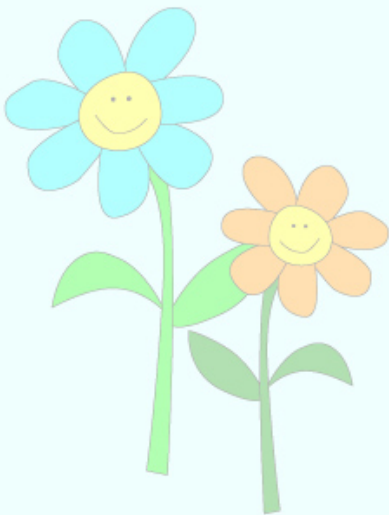
1. Find the mean, median, mode, and range of the following.

12, 15, 21, 12, 76, 45, 14, 23, 9, 12

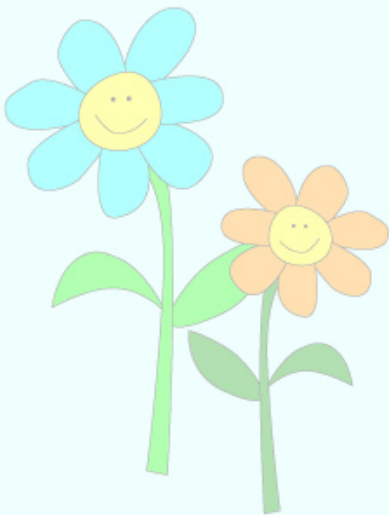


2. How many times could I expect to roll a number greater than 4 on a number cube, if I rolled it 100 times?

Would you rather be friends
with someone with shiny
brown hair or dull blonde hair?



Would you rather be friends
with someone with shiny
brown hair or dull blonde hair?



Is this a fair or bias questions? Why?

Define fair and bias in order to support
you answer.

Think-Pair-Share

fair

1. free from bias, dishonesty, or injustice: a fair decision; a fair judge.

2. legitimately sought, pursued, done, given, etc.; proper under the rules: a fair fight.

4. neither excellent nor poor; moderately or tolerably good: fair health.

5. marked by favoring conditions; likely; promising: in a fair way to succeed.




bi·as

2. a particular tendency or inclination, especially one that prevents unprejudiced consideration of a question; prejudice.

3. Statistics. a systematic as opposed to a random distortion of a statistic as a result of sampling procedure.

Definitions from <http://dictionary.reference.com>

Introduction: Restaurant Data, Presentation and Bias

 Introduction Video Link- Press Dot



Card Sort

1. Sort the cards into 2 groups: Fair Bias

2. Number each question as you go along.

- a. Fair/Bias (write one)
- b. Why?
- c. Change the situation so that it is the opposite. If fair, make it bias. If bias, make it fair.



3. You have 15 minutes

What does the word random mean?

How can you make a random choice?



Think-Pair-Share

Card Sort

1. Sort the scenarios into two groups.
Random / Non-Random

2. Be ready to justify why you grouped them that way.

3. You have 8 minutes.



Which is random and which is not?

Asking my friends whether I will win
the class president election?

or

Having someone ask every 20th students
that enters the school?



Can anyone involved in the election be the
surveyor? Why?

Book Work:

Pg. 550-551 Examples

Pg. 551 #1 -27

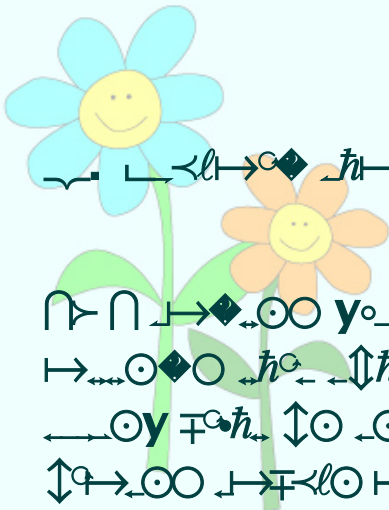


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 $\swarrow \circ \bullet \mapsto \mp _ \mapsto \circ \updownarrow h \circ o l \gg$

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Warm-Up

1. Create a dot plot for the following data and find the mean, median, mode, and range.

2, 5, 3, 4, 2, 5, 2, 5, 1

2. If you spin a spinner with five sections and two have the outcome you want. How many times would you expect that favorable outcome if you spin the spinner 150 times?



When doing surveys of large populations (i.e. the nation, the state, New York City), why is it helpful to take samples?

Define:

A sample is a

A population is



Card Sort:

1. Sort the cards into two groups: Random and Not Random
2. Be ready to justify your answers.
3. You will have 10 minutes.



Identify the sample and the population in each group below:

Example 1:

You pull 10 M &M's at a time from a bag.

Sample: _____

Population: _____

Now You Try:

A pollster surveys 500 people about who they would like to be president of the United States

Sample: _____

Population: _____

Ms. D'Auria asks 20 random kids what their favorite subject is in order to find out what subject is the favorite subject at WCCS.

Sample: _____

Population: _____



1. GOVERNMENT At a town council meeting, the chair asks 5 citizens attending for their opinions on whether to approve rezoning for a residential area.

Sample: _____

Population: _____

Random or Not: _____

2. BOTANY To determine the extent of leaf blight in the maple trees at a nature preserve, a botanist divides the reserve into 10 sections, randomly selects a 200-foot by 200-foot square in the section, and then examines all the maple trees in the section.

Sample: _____

Population: _____

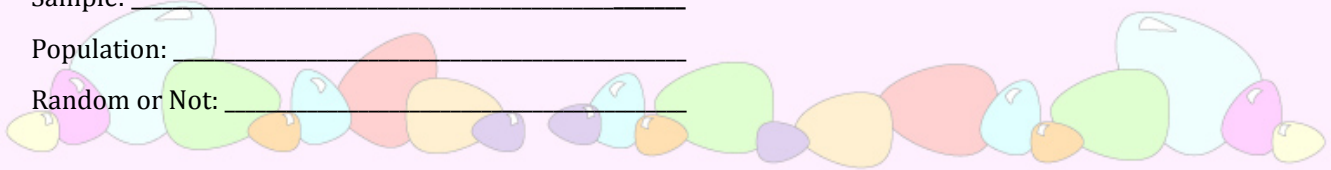
Random or Not: _____

3. FINANCES To determine the popularity of online banking in the United States, a polling company sends a mail-in survey to 5000 adults to see if they bank online, and if they do, how many times they bank online each month.

Sample: _____

Population: _____

Random or Not: _____



Activity: You work for Creative Inc., an advertising agency whose work is to promote the images of different corporations. You have three newclients: The New York Yankees, Columbia Records, and Cartoon Network. Choose one you want to work with and complete the appropriate polls below.

a. The New York Yankees: You want to find out whether Americans (not just New York City!) like the Yankees or the Mets more.

b. Columbia Records: You want to find out whether people like Beyonce or Lady Gaga more.

c. Coca-Cola Co. : You want to find out whether American prefer Coke or Pepsi.

For the survey you chose:

- 1. Come up three different unbiased ways you could poll people to see which they prefer.**
- 2. Then come up 2 different biased ways you could poll people to find out which they prefer.**

Note: You can change the questions and who you ask!



Exit Ticket

5. BUSINESS To learn which benefits employees at a large company think are most important, the management has a computer select 50 employees at random. The employees are then interviewed by the Human Relations department.

Sample: _____

Population: _____

Random or Not: _____ Why? _____



